

CLAIMS

1. A single wedge wrench, comprising:
two jaws (1, 2), one (1) of which has a zigzag gripping surface,
wherein the wrench further comprises a wedge (3) with a zigzag gripping surface (31), and the wedge (3) is mounted on an inner surface (21) of the other jaw (2) of the two jaws (1, 2) through a joint member and is slidable along the inner surface (21).
2. The wrench of claim 1, wherein a guiding rail (32) is configured in the wedge (3), a groove (33) is provided in the guiding rail (32), a spring (4) is positioned within the groove at a bottom portion (332) thereof along a longitudinal direction, and a guiding slot (22) corresponding to the guiding rail (32) and a blind hole (23) communicated with the guiding slot (22) are configured in the jaw (2) on which the wedge (3) is mounted.
3. The wrench of claim 2, wherein the joint member is an L-shaped joint member (5), a section (51) of the joint member (5) is disposed in the groove (33) of the wedge (3) and connected to the spring (4), and another section (52) of the joint member (5) is located in the blind hole (23), and a limitation element is provided in the blind hole (23) to confine the movement of the joint member (5).
4. The wrench of claim 1, wherein a guiding rail (24) is configured on the jaw (2), a groove (25) is configured in the guiding rail (24), a spring (4) is positioned within the groove (25) at a bottom portion (252) thereof along a longitudinal direction, and a guiding slot (34) corresponding to the guiding rail (24) and a blind hole (35) communicated with the guiding slot (34) are configured in the wedge (3).

5. The wrench of claim 4, wherein the joint member is an L-shaped joint member (5), a section (51) of the L-shaped joint member (5) is placed in the groove (25) of the second jaw (2) and connected to the spring (4), another section (52) of the L-shaped joint member (5) is located in the blind hole (35), and a limitation element is provided in the blind hole to confine the movement of the joint member (5).

6. The wrench of claim 3 or 5, wherein the limitation element is a bolt (6), which matches a thread provided at an open portion of the blind hole (23/35); or
the limitation element is a rivet.

7. The wrench of claim 1, wherein the joint member is a fixed joint member (8) mounted on the inner surface (21) of the second jaw (2), and the wedge (3) is connected to the joint member (8) and is slidable along the joint member (8) without departing from the joint member (8).

8. The wrench of claim 7, wherein a sliding slot (36) configured to correspond to the shape of the joint member (8) is provided in the wedge (3), a recess (37) is configured at a bottom of the sliding slot (36), a spring (4) is positioned in the recess (37), and a plate (9) is provided on a section (82) of the joint member (8) for blocking an end of the sliding slot (36) and the recess (37) after the wedge (3) is mounted on the joint member (8).

9. The wrench of claim 8, wherein screw holes (26, 26') are formed in the inner surface of the other jaw (2) on which the fixed joint member (8) is mounted, the apertures (81, 81') corresponding to the screw holes (26, 26') respectively are configured in the fixed joint member (8), and the fixed joint member (8) is secured in the jaw (2) by screwing bolts into the apertures (81, 81') and the screw holes (26, 26').

10. The wrench of claim 8, wherein an angle formed between the inner surface (21) of the jaw (2) on which the wedge (3) is mounted and the gripping surface of the jaw (1) is in a range from 10 degrees to 70 degrees.